WHAT IS CLAIMED IS:

1. A process for making thermoplastic resin coated articles, the process comprising:

applying an aqueous solution or dispersion of a first thermoplastic resin on the outer surface of an article substrate by dip, spray, or flow coating;

withdrawing the article from the dip, spray, or flow coating at a rate so as to form a first coherent film;

curing/drying the coated article until the first film is substantially dried so as to form a first coating;

optionally applying an aqueous solution or dispersion of a second thermoplastic resin on the outer surface of an article substrate by dip, spray, or flow coating;

withdrawing the article from the dip, spray, or flow coating at a rate so as to form a second coherent film;

curing/drying the coated article until the second film is substantially dried so as to form a second coating;

wherein at least one of the first and second thermoplastic resins comprises a thermoplastic epoxy resin.

2. The process of claim 1 wherein the curing/drying of the coating comprising a thermoplastic epoxy resin is performed so as to form an article that exhibits substantially no blushing or whitening when exposed to water.

3. The process of claim 1 further comprising the application of one or more additional coating layers to said article.

4. The process of claim 1 wherein at least one coating layer is crosslinked to provide chemical or mechanical abuse resistance.

5. The process of claim 1, wherein the article substrate comprises a polymer selected from the group consisting of polyesters, polyolefins, polycarbonates, polyamides and acrylics.

6. The process of claim 5, wherein the article substrate comprises amorphous and/or semi crystalline polyethylene terephthalate.

7. The process of claim 5, wherein said article comprises a preform.

8. The process of claim 1 which further comprises the removal of any excess material between the coating and curing/drying steps.

9. The process of claim 1 wherein said curing/drying source is selected from one or more of the group consisting of infrared heating, electron beam processing, forced air, flame curing, gas heaters, UV radiation, such that the coating is formed without undesirably heating the article substrate.

10. The process of claim 9 wherein said curing/drying source is infrared heating and forced air.

11. The process of claim 10 wherein the temperature of the forced air is between about 10°C to about 50°C and sufficient to prevent undesirable shrinkage of article while maximizing the removal of liquids without prematurely sealing the article's outer surface so as to entrap unexpelled liquid.

12. The process of claim 9 wherein said curing/drying source is infrared heating.

13. The process of claim 1 wherein said article is rotated to achieve consistent coating and curing/drying.

14. The process of claim 1 wherein said thermoplastic resin coatings comprise one or more of the following characteristics: gas-barrier protection, UV protection, scuff resistance, blush resistance, and/or chemical resistance.

15. The process of claim 1 wherein said thermoplastic epoxy resin coating comprises phenoxy resins.

16. The process of claim 15 wherein said phenoxy resin coating comprises hydroxy-phenoxyether polymers.

17. The process of claim 16 wherein said hydroxy-phenoxyether polymer coating comprises polyhydroxyaminoether copolymers made from resorcinol diglycidyl ether, hydroquinone diglycidyl ether, bisphenol A diglycidyl ether, or mixtures thereof.

18. The process of claim 15 wherein said solution or dispersion of the thermoplastic epoxy resin comprises organic acid salts made from the reaction of polyhydroxyaminoethers with phosphoric acid, lactic acid, malic acid, citric acid, acetic acid, glycolic acid and/or mixtures thereof.

19. The process of claim 3 wherein said third coating is an acrylic, phenoxy, latex, or epoxy coating that is crosslinked during the drying process.

20. An apparatus for making coated articles comprising:

a conveyor that transports said articles through a flow coating system; and

a flow coating system comprising:

a first flow coating unit which comprises:

a tank or vat containing an aqueous solution/dispersion coating material wherein said tank or vat is in fluid communication with a fluid guide;

a fluid guide wherein said coating material flows off of said fluid guide forming a sheet or falling shower curtain;

a coating material collector which receives unused coating material;

a first curing/drying unit which comprises:

an oven or chamber in which a curing/drying source is located;

wherein said articles are moved through the oven or chamber by the article conveyor;

a second flow coating unit which comprises:

a tank or vat containing an aqueous solution/dispersion coating material wherein said tank or vat is in fluid communication with a fluid guide;

a fluid guide wherein said coating material flows off of said fluid guide forming a sheet or falling shower curtain;

a coating material collector which receives unused coating material; and

a second curing/drying unit which comprises:

an oven or chamber in which a curing/drying source is located;

wherein said articles are moved through the oven or chamber by the article conveyor;

wherein at least one of the aqueous solution/dispersion coating materials comprises a thermoplastic epoxy resin.

21. The apparatus of claim 20 wherein a third flow coating unit and a third curing/drying unit are included.

22. The apparatus of claim 20 wherein a single integrated processing line comprises two or more flow coating units and two or more curing/drying units wherein the article conveyor transports the articles through the processing line.

23. The apparatus of claim 20 comprising one or more coating modules and an article conveyor;

wherein each coating module comprises:

a self-contained processing line comprising one or more flow coating units and one or more curing/drying units; and

wherein the article conveyor can transport the articles into, within, and between coating modules and eject the article from the system.

24. The apparatus of claim 20 wherein said article conveyor rotates said articles while transporting them through the system.

25. The apparatus of claim 20 wherein said fluid guide is angled.

26. The apparatus of claim 20 wherein said coating material collector is in fluid communication with said tank or vat thereby recycling and reusing any excess material.

27. The apparatus of claim 20 wherein the tank or vat of the first and second flow coating units is a single, common tank or vat.

28. The apparatus of claim 20 wherein the oven or chamber of the first and second curing/drying units is a single, common oven or chamber.

29. The apparatus of claim 20 further comprising a drip remover positioned between said coating material collector and said curing/drying unit.

30. The apparatus of claim 29 wherein said drip remover comprises one or more of the following: rotation, gravity, wiper, brush, sponge roller, air knife or air flow.

31. The apparatus of claim 20 wherein the curing/drying source comprises one or more sources selected from infrared heating lamp, electron beam processing source, forced air, flame, gas heater, or UV radiation source.

32. The apparatus of claim 31 wherein said curing/drying source comprises infrared heating and forced air.

33. The apparatus of claim 32 wherein the temperature of the forced air is between 10 C to about 50 C.

34. The apparatus of claim 32 wherein the temperature of the forced air is sufficient to prevent undesirable shrinkage of the article while maximizing the removal of liquids without prematurely sealing the surface and entrapping unexpelled liquid.

35. The apparatus of claim 20 wherein said article is a preform.

36. The apparatus of claim 35, wherein the preform comprises a material selected from the group consisting of polyesters, polyolefins, polycarbonates, polyamides and acrylics.

37. The apparatus of claim 35, wherein the preform comprises amorphous or semi crystalline polyethylene terephthalate.

38. A multilayer article comprising:

a substrate having at least one layer comprising thermoplastic epoxy resin coating material disposed on at least a portion of said substrate to form a coated article, wherein the coated article exhibits substantially no blushing or whitening when exposed to water.

39. The article of Claim 38, wherein the article comprises a thermoplastic material selected from the group consisting of polyester, polypropylene, polyethylene, polycarbonate, polyamides and acrylics.

40. The article of claim 38 wherein the substrate comprises polyethylene terephthalate.

41. The article of Claim 38, further comprising one or more layers of thermoplastic resin coating material disposed on said substrate.

42. The article of Claim 38, wherein the article is a preform or bottle having a body portion and a neck portion, and said coating is disposed substantially only on the body portion of the preform or bottle.

43. The article of Claim 38, wherein the coated article has substantially no distinction between coating layers.

44. The article of claim 38, wherein the coating layers are applied by dip, spray, or flow coating.

45. The article of claim 38, wherein the exposure to water occurs for about 24 hours and with the water at a temperature of about 0°C to about 25°C.

46. A multilayer container preform or bottle having a body portion, end cap, and neck portion, said preform or bottle comprising:

a first substrate comprising a thermoplastic material

said thermoplastic material chosen from the chosen from the group consisting of polyesters, polyolefins, polycarbonates, polyamides and acrylics;

one or more layers of thermoplastic resin coating material disposed on said substrate;

wherein one or more layers contain one or more of the following characteristics: gas-barrier protection, UV protection, scuff resistance, blush resistance, chemical resistance;

wherein the coating is disposed substantially only on the body portion of the preform; and

wherein the finished product has substantially no distinction between layers.

47. A preform or bottle of claim 46 wherein the coating layers comprise:

an O_2 scavenger inner coating layer;

a CO_2 scavenger intermediate layer;

an UV protection intermediate layer; and

an outer layer of partially or highly cross-linked material.

48. A preform or bottle of claim 46 wherein the coating layers comprise:

an inner coating layer of UV protection material; and

an outer layer of partially or highly cross-linked material.

49. The preform or bottle of claim 46 wherein the preform or bottle substrate comprises amorphous or semi crystalline polyethylene terephthalate.

50. The preform or bottle of claim 46 wherein the coating layers are applied by dip, spray, or flow coating.

51. The preform of claim 46 wherein successive layers of coating material decrease in amount of coating material required to thoroughly coat the preform.